



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/777,888      | 02/12/2004  | Michael H. Retzer    | CM05169H            | 1939             |

22917 7590 03/22/2007  
MOTOROLA, INC.  
1303 EAST ALGONQUIN ROAD  
IL01/3RD  
SCHAUMBURG, IL 60196

|          |
|----------|
| EXAMINER |
|----------|

NGUYEN, THUAN T

|          |              |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

2618

| SHORTENED STATUTORY PERIOD OF RESPONSE | NOTIFICATION DATE | DELIVERY MODE |
|--|-------------------|---------------|
| 3 MONTHS                               | 03/22/2007        | ELECTRONIC    |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Notice of this Office communication was sent electronically on the above-indicated "Notification Date" and has a shortened statutory period for reply of 3 MONTHS from 03/22/2007.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

Docketing.Schaumburg@motorola.com  
APT099@motorola.com

**Office Action Summary**

Application No.

10/777,888

Applicant(s)

RETZER ET AL.

Examiner

THUAN T. NGUYEN

Art Unit

2618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

*A person shall be entitled to a patent unless --  
(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.*

2. Claims 1-13 are rejected under 35 U.S.C. 102(e) as being anticipated by Yildiz et al. (U.S. Patent No. 6,674,738 B1).

Regarding claim 1, Yildiz teaches “a method for improving throughput in a wireless local area (WLAN), the method comprising the steps of: buffering a set of messages; identifying a target address for the set of messages; and concatenating the set of messages based on the target address” (col. 7/line 56 to col. 8/line 36 & Fig. 1 for a wireless LAN; col. 9/line 34 to col. 10/line 45 for set of protocols are used including having frames buffering for other stations send messages in item h; and col. 12/lines 13-19 for messages are concatenated based on the target address).

As for claim 2, Yildiz teaches “wherein the step of concatenating further comprises the steps of: (a) eliminating a sync interval; (b) preserving a message header; (c) transmitting a subsequent message; (d) transmitting the message header; and (e) repeating steps (a) through (d), until a last subsequent message in the set of messages have been sent”, i.e., this procedure

Art Unit: 2618

equivalent to the process of evaluating and assembling data segments based on the message headers and the routine to check it again and again (refer to Fig. 5 and col. 14/line 37 to col. 15/line 27 for gathering data segments for the target destination).

As for claim 3, Yildiz further teaches “wherein the step of preserving further comprises the step of preserving a start of frame delimiter (SFD) and transmitting the SFD” (Fig. 2A, see col. 10/lines 46-60 as frame control field as SFD).

As for claims 4 and 5, Yildiz teaches “wherein the message is identified as a MAC protocol data unit (MPDU) type message” (Fig. 2A); and “wherein the message is identified as a PLCP protocol data unit (PPDU) type message” (col. 28/lines 17-37 for PLCP protocol header).

As for claims 6-9, Yildiz teaches “wherein the step of concatenating based on the target address comprises identifying the target address as an unicast type address”; “wherein the step of concatenating based on the target address comprises identifying the target address as a broadcast type address”; and “wherein the step of concatenating based on the target address comprises identifying the target address as a multicast type address”; and “wherein the step of concatenating based on the target address comprises identifying the target address as an unicast type address, a broadcast type address and a multicast type address” (refer to Figs. 29-31, and col. 29/line 16 to col. 30/line 39 for unicast, multicast or broadcast concerned).

Regarding claims 10-11, Yildiz teaches “a method for improving throughput in a wireless local area (WLAN), the WLAN comprising a plurality of mobile station having diversity receivers and a set of messages, a method comprising the steps of: replicating a first signal path and a second signal path in the diversity receivers; determining an energy level of the first signal path and the second signal path; and choosing the best path based on the energy level to recover

Art Unit: 2618

the set of messages” and “wherein the step of choosing the best path based on the energy level to recover the set of messages, comprises decoding the incoming RF signal of the first signal path and the second signal path continuously” (refer to Fig. 1, and col. 8/line 10-62 & col. 12/line 49 to col. 13/line 26 for monitoring tools and power management for managing and determining the energy levels of the mobile diversity receivers).

Regarding claim 12, Yildiz inherently suggests “a diversity receiver for improving the throughput in a wireless local area network, the diversity receiver having a first signal path and a second signal path, comprising: a first energy detector, a first start of frame delimiter (SFD) detector and a first parser for receiving the first signal path; and a second energy detector, a second SFD detector and second parser for receiving the second signal path” and “wherein a timing control unit continuously chooses between the first signal and the second signal based on continuous feedback from the first energy detector and the second energy detector in order to recover a set of messages” (refer to Fig. 1, and col. 8/line 10-62 & col. 12/line 49 to col. 13/line 26 for monitoring tools and power management for managing and determining the energy levels of the mobile diversity receivers).

### ***Conclusion***

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Traimin, Eng et al, Heinonen et al., and Mahany et al. (in PTO 892 attached) disclose systems related to WLAN and techniques.

Art Unit: 2618

4. **Any response to this action should be mailed to:**  
Commissioner of Patents and Trademarks  
Washington, D.C. 20231

**or faxed to the New Central Fax number:**  
(571) 273-8300, (for Technology Center 2600 only)

Hand deliveries must be made to Customer Service Window,  
Randolph Building, 401 Dulany Street, Alexandria, VA 22314.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tony Thuan Nguyen whose telephone number is (571) 272-7895.

The examiner can normally be reached on Monday-Friday from 9:30 AM to 7:00 PM.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Tony T. Nguyen  
Primary Examiner  
Art Unit 2618

TTN  
March 16, 2007